Amendment to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (Currently Amended): A method of using a pixel processing engine to create an overlay window by generating a plurality of lines of video overlay data, the method comprising:

processing video data in the pixel processing engine;

sending the processed video data to be stored in a line buffer;

utilizing a video memory bandwidth twice for each full line of video overlay data stored in the line buffer, wherein the utilizing the video memory bandwidth twice comprises:

setting an indicator in a line buffer, the line buffer to store up to ~~a~~ the full line of video overlay data for the overlay window;

reading pixel data for a current video line from the line buffer;

determining when the pixel data reaches the indicator;

~~and~~

loading pixel data for a first half of a ~~the~~ next video line into the line buffer based on the determining when the pixel data for the current video line reaches the indicator, wherein the indicator is at approximately a middle of the line buffer; and~~,~~

loading pixel data for a second half of the next video line into the line buffer based on determining when the line buffer is about empty of the current video line of pixel data; and

sending the stored video data from the line buffer to be displayed.

2. (Currently Amended): A method comprising:

setting an indicator in a line buffer, the line buffer to store up to a full line of video overlay data;

reading pixel data for a current video line from the line buffer;

determining when the pixel data reaches the indicator; ~~and~~

loading data for the next video line into the line buffer based on the determining when the pixel data reaches the indicator wherein setting the indicator in the line buffer comprises setting the indicator at approximately a middle of the line buffer, wherein loading data for the next video line into the line buffer comprises utilizing a video memory bandwidth twice for each full line of video overlay data stored in the line buffer to reduce a requirement for an amount of horizontal blanking (Hblank) time for a display monitor, ~~and~~ wherein loading data for the next video line into the line buffer further comprises loading a first half of the data for the next

video line when the pixel data being read reaches the indicator in the line buffer, and further comprises loading a second half of the data for the next video line when the pixel data being read reaches the end of the line buffer.

3. (Currently Amended): The method of Claim 1, ~~wherein loading data for the next video line comprises:~~

~~loading a first portion of the data for the next video line when the pixel data reaches the indicator; and~~

~~loading a second portion of the data for the next video line when the pixel data reaches the end of the line buffer~~

further comprising utilizing the video memory bandwidth twice for each full line of video overlay data stored in the line buffer to reduce a requirement for an amount of horizontal blanking (Hblank) time for a display monitor.

4. (Original): The method of Claim 1, further comprising processing the current video line data for display.

5. (Original): The method of Claim 4, further comprising displaying the processed video line data.

6. (Original): The method of Claim 5, further comprising creating a video overlay from the processed video line data.

7. (Original): The method of Claim 1, further comprising positioning the pixel data on an active display to create a video overlay.

8. (Currently Amended): A method of processing video overlay data comprising:

reading video overlay data for a current video line from a line buffer, the line buffer to store up to a full line of the video overlay data;

detecting the position in the line buffer where the video overlay data is located; ~~and~~

loading data for the next video line into the line buffer when the video overlay data for the current video line is located at a predetermined position approximately at a middle of the line buffer,

wherein loading data for the next video line comprises:

loading a first portion of data for the next video line into the line buffer when the video data from the predetermined position has been read; and

loading a second portion of data for the next video line into the line buffer when the video data from the end of the line buffer has been read.

9. (Previously Presented): The method of Claim 8, further comprising setting the predetermined position at a position before all the current line of video overlay data is read.

10. (Currently Amended): A method of reducing a timing requirement for a horizontal blanking (Hblank) time for processing video overlay data, the method comprising:

reading video overlay data for a current video line from a line buffer, the line buffer to store up to a full line of the video overlay data;

detecting the position in the line buffer where the video overlay data is located; and

loading data for the next video line into the line buffer when the video overlay data for the current video line is located at a predetermined position, wherein the predetermined position is at approximately a midpoint of the line buffer, and wherein loading data for the next video line into the line buffer comprises loading a first half of the data for the next video line after the video data for the current video line has been read from the predetermined position; and ~~further comprises~~

loading a second half of the data for the next video line after the video data for the current video line has been read from the end of the line buffer.

11. (Currently Amended): The method of Claim 8, further comprising utilizing a video memory bandwidth twice for each full line of video overlay data stored in the line buffer ~~wherein loading data for the next video line comprises:~~

~~loading a first portion of data for the next video line into the line buffer when the video data from the predetermined position has been read; and~~

~~loading a second portion of data for the next video line into the line buffer when the video data from the end of the line buffer has been read~~.

12. (Original): The method of Claim 8, further comprising processing the current video line data for display.

13. (Original): The method of Claim 12, further comprising displaying the processed video line data.

14. (Currently Amended): A overlay display processor comprising:

a line buffer to store up to a full line of video overlay data, the line buffer configured to have ~~having~~ a plurality of memory locations, the line buffer configured ~~adapted~~ to provide data to a display; ~~and~~

an indicator configurable to be positioned at a predetermined memory location approximately in a middle of the line buffer, wherein the line buffer is configured to begins to read data for a first half of a next video data line when the line buffer provides data from the indicator memory location, and wherein the line buffer is further configured to read a second half of the next video data line when the line buffer is empty of data for a current video data line; and

graphic memory to provide the video pixel data to the line buffer, wherein a video memory bandwidth is configured to be utilized twice for each full line of video overlay data stored in the line buffer.

15. (Currently Amended): The computer of Claim 14, further comprising:

~~graphic memory which provides the video pixel data to the line buffer; and~~

a pixel processing engine to determine whether data for the ~~a~~ current video line has been read from the predetermined memory location in the line buffer, the pixel processing engine further

configured to subsequently load ~~a~~ the first half ~~first portion~~ of data for the next video line into the line buffer.

16. (Currently Amended): The computer of Claim 14, wherein the line buffer is configured to provide~~s~~ data to the display for ~~a~~ the current video line.

17. (Currently Amended): The ~~A~~ overlay display processor of Claim 14, wherein the video memory bandwidth is configured to be utilized twice to reduce a requirement for an amount of horizontal blanking (Hblank) time for the display~~comprising:~~

~~a line buffer to store up to a full line of video overlay data, the line buffer having a plurality of memory locations, the line buffer adapted to provide data to a display; and~~

~~an indicator positioned at a predetermined memory location in the line buffer, wherein the line buffer begins to read data for a next video data line when the line buffer provides data from the indicator memory location, wherein the indicator is located at a position at approximately a midpoint of the line buffer~~.

18. (Currently Amended): A overlay display system comprising:

a video memory to ~~which~~ store~~s~~ video data;

an overlay processing engine comprising:

a line buffer to store up to a full line of video overlay data, the line buffer to receive the video overlay data from the video memory, wherein said line buffer includes an indicator positioned at a predetermined memory location in the line buffer, wherein the predetermined memory location comprises approximately a middle point of the line buffer;

video processing circuitry to prepare the video overlay data in the line buffer to be displayed; and

a display to receive the processed data from the overlay processing engine, wherein the line buffer is configured to read data for a next video data line when the line buffer provides a predetermined amount of data to the display for a current video data line, wherein a requirement for an amount of horizontal blanking (Hblank) time for the display is reduced by having a first half of data for the next video data line in the line buffer before a beginning of a horizontal blanking interval is reached.

19. (Currently Amended): ~~A~~ The overlay display system of Claim 18 ~~comprising:~~

~~a video memory which stores video data;~~

~~an overlay processing engine comprising:~~

~~a line buffer to store up to a full line of video overlay data, the line buffer to receive the video overlay data from the video memory, wherein said line buffer includes an indicator positioned at a predetermined memory location in the line buffer;~~

~~video processing circuitry to prepare the video overlay data in the line buffer to be displayed; and~~

~~a display to receive the processed data from the overlay processing engine, wherein the line buffer is to read data for a next video data line when the line buffer provides a predetermined amount of data to the display for a current video data line,~~ wherein the predetermined amount of data is approximately one half of the data comprising the current video data line.

20. (Currently Amended): The computer of Claim 18, wherein the overlay processing engine is configured to provide~~s~~ data to the display to create a video overlay.

21. (Original): The computer of Claim 18, wherein the video processing circuitry includes pixel color conversion and adjustment.

22. (Cancelled)

23. (Currently Amended): A program storage device readable by a machine comprising instructions that cause the machine to:

~~set an indicator in a line buffer, the line buffer to store up to a full line of video overlay data;~~

~~read pixel data for a current video line from the line buffer;~~

~~determine when the pixel data reaches the indicator; and~~

~~load data for the next video line into the line buffer based on the determining when the pixel data reaches the indicator, wherein the instructions further cause the machine to set the indicator at approximately a middle of the line buffer.~~

process video data in a pixel processing engine;

send the processed video data to be stored in a line buffer; and

utilize a video memory bandwidth twice for each full line of video overlay data stored in the line buffer to reduce a requirement for an amount of horizontal blanking (Hblank) time for a display, wherein utilizing the video memory bandwidth twice comprises instructions to:

set an indicator in a line buffer, the line buffer to store up to the full line of video overlay data for the overlay window;

read pixel data for a current video line from the line buffer;

determine when the pixel data reaches the indicator; and

load pixel data for a first half of a next video line into the line buffer based on the determining when the pixel data for the current video line reaches the indicator, wherein the indicator is at approximately a middle of the line buffer; and

load pixel data for a second half of the next video line into the line buffer based on determining when the line buffer is about empty of the current video line of pixel data; and

send the stored video data from the line buffer to be displayed.